

JUN 14 1993

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

ORIGINAL

In the Matter of )  
 )  
Amendment of Part 74 of the )  
Commission's Rule Governing )  
Use of the Frequencies in the )  
Instructional Television )  
Fixed Service )

MM Docket No. 93-106

**COMMENTS OF  
TRANSWORLD TELECOMMUNICATIONS, INC.**

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### SUMMARY

Transworld Telecommunications, Inc., ("TTI") supports the Commission's proposal to alter the per channel minimum use requirements for ITFS operators, allowing ITFS applicants proposing a minimum average of 20 hours of use per week, to seek up to four channels even if all 80 hours of instructional use is to be diverted to one channel. Adoption of this proposal for an interim five-year period will free up the other three channels for full-time use by the wireless cable operator in the market and will benefit both the operator and the ITFS licensee.

The benefits of the channel loading proposal to educators, wireless cable operators and the wireless cable industry outweigh any potential detriments. Through this proposal, a closer and mutually beneficial relationship will be forged between educators and wireless cable operators in markets around the country. Wireless operators, previously reluctant to enter into leasing arrangements with educators because of the limited availability of channels, will be more likely to contract with educators. These arrangements will also provide numerous benefits to educators including equipment, funding for programming and lease payments that can be utilized for additional educational needs.

The proposed rules are needed because channel mapping technology is not generally a satisfactory alternative. Channel mapping involves switching transmitted signals to each of four

different ITFS channels to allow for transmission of the signal without interruption to the viewer. Although this technology has been beneficial to wireless operators in a few markets, it is both costly and has significant operational problems. (For example, the viewer cannot tape the programming if channel-mapping is utilized.) Adoption of the instant channel loading proposal will alleviate these problems and allow wireless operators to accumulate the channels necessary to compete with cable.

The channel loading proposal should be adopted without the "safeguards" proposed by the Commission in the NPRM. The only safeguard needed is the five-year "sunset" provision. The other proposed safeguards would vitiate the benefits of the proposal. "Ready recapture" would discourage the wireless operator from contracting with the ITFS licensee, because the operator needs the certainty of having a sufficient lease period to recoup the capital investment in the ITFS channels. Giving a comparative advantage to ITFS applications which do not sign wireless cable leases would simply favor well-endowed private institutions over other educators without any rational basis. Limiting the channel loading proposal to the five-year interim period will prevent any abuses.

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To: The Commission

**COMMENTS REGARDING NOTICE OF  
PROPOSED RULE MAKING**

Transworld Telecommunications, Inc., ("TTI"), by its attorneys and pursuant to Section 1.415 of the Commission's Rules, hereby submits its comments regarding the Federal Communications Commission's Notice of Proposed Rule Making, ("NPRM"), FCC 93-183, released April 26, 1993, in the above captioned proceeding. The NPRM was initiated to solicit further comment on the Commission's minimum ITFS programming requirements.

TTI is filing these comments in support of the Commission's proposal to alter the per channel minimum use requirements for ITFS operators, thereby permitting ITFS applicants to seek up to four channels where they propose a minimum average of 20 hours of use

compression is expected to be cost effective, will liberate the other channels for full-time use by its lessee wireless cable operator and further enhance the symbiotic relationship between educators and their wireless cable partners in markets around the country. In effect, what is being proposed herein is the issuance of a joint "station license" for an interim period of five years, with the spectrum allocated between the ITFS licensee and wireless

Currently, TTI is leasing excess capacity on eight ITFS channels from two licensees and has been leasing the channels for three years. TTI intends to lease excess capacity on an additional eight channels. This additional capacity has aided TTI's ability to compete with the cable operators in the market and the added capacity offered by the instant channel loading proposal will only enhance that competitiveness.

1. There Are Significant Benefits to the Five-Year Channel Loading Proposal.

In the NPRM, the Commission invites comment on the benefits and detriments of its proposal to allow ITFS programming to be diverted to one of its four channels, thereby freeing the other channels for leasing to wireless cable operators. In addition to the channel loading proposal, the Commission also proposes safeguards to ensure that ITFS service is protected and invites comment on those proposals. TTI, based on its experience in the industry and its observations, believes that the benefits of this proposal to wireless cable operators, educators and the wireless cable industry as a whole outweigh any potential detriments and that many of the safeguards proposed are unnecessary and defeat the purpose of the channel loading proposal. Among the foremost benefits of allowing "channel loading" is the continued (and in some markets new) financial support that educators will enjoy from wireless cable operators.

As the Commission acknowledged in the NPRM at ¶ 17, leasing by wireless cable operators of excess capacity on ITFS channels has helped to "reinvigorate[] the ITFS service". Since the Commission began allowing ITFS licensees and applicants to lease excess capacity for non-ITFS programming, wireless cable operators and educators have been able to forge a mutually advantageous relationship in markets around the country. By leasing excess channel capacity from ITFS licensees, a wireless operator is able to accumulate channels on which to transmit commercial programming. Educators have benefitted from this relationship because wireless operators have agreed to provide transmission and receive equipment for the schools, to build the channels and, in addition, to provide monthly lease payments for the channels, which payments the educators use for additional programming and other educational needs. Without the financial gain realized from these leasing arrangements, many educators would not have been able to construct or operate their ITFS systems in the first place.

2. Channel Loading Is Needed Today; Channel Mapping Will Not Suffice.

Typical channel mapping technology involves switching transmitted signals to each of four different ITFS channels to allow for transmission of the signal without interruption to the viewer. Thus, once a viewer picks a channel to watch programming, that channel does not change for the viewer, although the ITFS



channel on which it is being transmitted does change. Channel mapping enables a wireless cable operator to meet the programmer's requirement that programming be viewed on the same channel as well as the Commission's programming requirements.

Although the Commission's acceptance of the use of channel mapping has been helpful to the wireless cable industry, channel mapping has significant problems. For many wireless cable operators, such as TTI, the high cost of channel mapping equipment is a deterrent to using the technology. It can cost an operator more than \$100,000 to purchase the switching equipment for the headend in addition to the equipment needed for each subscriber box. For many wireless operators this cost is and will be prohibitive, especially in the development of smaller markets. As the Commission is well aware, the wireless cable industry has had numerous funding problems. Most wireless cable operators are constantly struggling to find capital and the added cost of

to a potential subscriber who utilizes his/her VCR to tape programs.<sup>2</sup> In addition, the equipment is subject to malfunction and failure which can prove costly for an operator. In summary, use of channel mapping is ex-ceedingly expensive and also causes the wireless cable operator to offer an inferior quality of service compared to its wired cable competitor.

The Commission's channel loading proposal will allow an ITFS applicant proposing to transmit 20 hours of programming per channel to apply for four channels and then divert all 80 hours of programming to one channel, thereby freeing the other channels for lease by a wireless cable operator without resort to channel mapping. This will bring further benefits to both wireless operators and educators. Wireless cable operators typically sell service to subscribers at 25-30% below its wired competitors in the market. Adoption of this channel loading proposal will allow operators to be even more competitive by reducing operating costs and enabling operators to maintain low rates for longer periods. Wireless cable will become a more viable competitor to (and check upon the market power of) wired cable systems. For educators, at a time when most are facing constricting revenues from traditional sources (i.e., local taxes), a revenue increase attained through leasing arrangements with wireless operators is sorely needed.

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<sup>2</sup> Channel mapping equipment also prevents a subscriber from using the viewing window option on his/her television.

The Commission pointed out in the NPRM at ¶ 17, that "[C]hannel loading will provide the incentive for wireless cable operators which may have been reluctant to invest in a partnership with an educator yielding no full-time access to ITFS channels." For wireless operators reluctant to use channel mapping for either cost or technological reasons, channel loading will provide them with the additional channel capacity necessary to be competitive with cable operators without the high costs or technological limitations. Wireless operators who have been reluctant to form partnerships with educators will be more willing to do so if they can be assured of the uninterrupted use of the channels. By implementing channel loading for five years rather than just three years, the FCC will allow the wireless cable industry to become more fully established in many markets, and will create a window of opportunity for compression to alleviate existing spectrum limitations. It will also further invigorate ITFS service. Educators will receive substantial equipment and funding through these leasing arrangements. Therefore the benefits to both educators and wireless cable operators outweigh any of the potential detriments and the channel loading proposal should be adopted.

3. There Is No Threat of Abuse, So The Proposed "Safeguards" Are Unnecessary and Even Counter Productive.

In the NPRM, the Commission has requested comment on certain proposed safeguards designed to ensure that by allowing channel

loading, ITFS service is not abused. While TTI understands the Commission's desire to protect ITFS service, TTI does not consider the proposed safeguards necessary and, in fact, finds that several of the safeguards conflict with the purpose of the channel loading proposal, hindering rather than helping the relationship between ITFS licensees and wireless cable operators.

(a) Channel Loading Should Not Be Limited.

The first safeguard proposed in the NPRM is limiting channel loading, so that less than three channels are liberated for transmission of commercial programming. Such a limitation on channel loading would conflict with the very purpose of the channel loading proposal, which is to provide additional capacity for wireless operators and to encourage partnerships between educators and wireless operators. If an ITFS applicant or licensee has the programming to transmit over more than one channel, then it can negotiate a suitable arrangement with the wireless operator. Currently, many ITFS licensees do not have sufficient programming (or funding) to broadcast on more than one channel, and the additional channels would not be used. In some markets ITFS licensees are using additional channels as repeaters rather than for the broadcast of programming.<sup>3</sup> Thus, this additional channel

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<sup>3</sup> In several markets around the country, ITFS licensees broadcast on two channels by using a third channel to repeat the signal between the two channels. Thus, an ITFS licensee utilizes three channels for broadcasting the programming of only one

capacity is wasted when it could be used more efficiently in a

(c) "Ready Recapture" Would Eliminate All Benefits to Wireless Cable Without Benefitting ITFS Licensees or the Public.

The Commission is also proposing to safeguard ITFS service by requiring ready recapture of all four channels by the ITFS licensee to transmit educational programming if the need arises. Again, TTI does not believe that the Commission should add such a requirement, because it would destroy all benefits to the wireless cable operator. It allows the ITFS licensee to hold a gun to the wireless operator's head. The Commission cannot expect any wireless operator to purchase equipment, advertise programming availability, beef up installation capacity, and charge reasonable rates to subscribers, when the ITFS licensee can reduce the channel capacity, create customer churn, and waste the investment in customer installations and ITFS transmitters by exercising such "Commission mandated" recapture rights.

As a wireless cable operator in the Tampa market, TTI must provide a competitive service to subscribers in order to compete with cable. To be competitive, TTI's service must include a sufficient number of channels on which to transmit programming. Even more importantly, TTI's wireless cable service, as a new competitor, must retain credibility with existing and potential subscribers. TTI is at a disadvantage, because it presently offers only 19 non-broadcast channels while TTI's cable competition offers 40 or 50 non-broadcast channels. At the very least, our

advertisements offering 27 channels have to continue to be true.<sup>4</sup> Ready recapture as proposed in the NPRM will impede TTI's ability to compete because it threatens TTI's access to eight ITFS channels now operated and the eight more soon to be ready for operation, thereby making TTI unable to offer a competitive service to cable, or even to fulfill the limited promises TTI has made in its advertising.

Even ready recapture of a lesser number of ITFS channels poses the same problem. A wireless operator leasing time on 15 of 20 ITFS channels could lose 5 of those channels if every ITFS licensee re-captured just one channel. Although allowing the ready recapture of only one channel rather than four would be less disruptive to a wireless operator, the FCC would still be disrupting wireless cable service, undercutting wireless cable's credibility and undoubtedly a significant loss in subscribers. If the Commission wants to encourage wireless competition to cable, it cannot continue to place wireless cable operators at a horrendous disadvantage.

(d) The Present ITFS Selection System Should Not Be Changed.

The Commission's next "safeguard" proposal would give a comparative advantage to ITFS applicants who promise to refrain

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<sup>4</sup> Copies of TTI's channel line-up and representative advertising are attached as Exhibit A hereto.

from using channel loading or channel mapping. This proposal, in effect, will penalize those bona fide ITFS applicants who need the funding that channel leasing arrangements provide. It creates a preference for privately-endowed educators at the expense of equally-deserving public institutions. It could also prevent a wireless cable operator from getting access to the additional channels it needs to be competitive in a particular market, because all other merit points being equal, the ITFS applicant with a wireless cable lease arrangement will lose. Indeed, by permanently denying channel access to the wireless cable operator, it could doom that operator to failure, and eliminate the other ITFS operations in the market which cannot exist without the wireless cable subsidy. This particular "safeguard" could gut the availability of ITFS programming.

(e) Existing ITFS Eligibility Restrictions Are Sufficient to Prevent Abuses.

The Commission is also seeking comment on whether, in order to discourage ITFS applicants from seeking a "financial bonanza", there should be a heightened demonstration of bona fide educational intent. The current rules already are strict about what entities are eligible for ITFS licenses. Specifically, Section 74.932(a) of the rules states in pertinent part that:



A license for an instructional television fixed station will be issued only to an accredited institution or to a governmental organization engaged in the formal education of enrolled students or to a nonprofit organization whose purposes are educational....

Each ITFS licensee must provide instructional programming on the channels for which it has applied. 47 C.F.R. §74.902(d). Imposing additional restrictions assumes that these bona fide educational entities are applying for the ITFS channels only to receive financial gain. If this were true, then the Commission's decision ten years ago to allow leasing of ITFS channels to wireless cable operators would have had the same effect. It did not. The additional restriction on ITFS eligibility is unnecessary.

4. Section 74.902(d) of the Rules Is Compatible with Channel Loading on an Interim Five-Year Basis.

The Commission is concerned that modifying Sections 74.931(a) and (e)(2) for even an interim five-year period will conflict with Section 74.902(d), which limits a licensee "to the assignment of no more than four channels in a single area of operation" and states that an applicant will only be authorized for the number of channels for which it demonstrates a need. As pointed out in the NPRM at ¶ 19: "Section 74.902(d) was not undermined by channel mapping" and as the next small step, interim channel loading would not undermine the rule either. An ITFS licensee will be providing 80 hours of ITFS programming which could be spread over the four


channels but for this interim period only is being moved to one channel. Potentially, over the next five years while this channel  
leading program is in effect, the TMSG license will be added to

WHEREFORE, for the foregoing reasons, TTI supports the Commission's proposal to allow channel loading of ITFS channels over the next five years.

Respectfully submitted,

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